



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,231	12/11/2001	Antonio Colmenarez	US010537	3116

24737 7590 12/02/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

LU, TOM Y

ART UNIT	PAPER NUMBER
----------	--------------

2621

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,231

Applicant(s)

COLMENAREZ ET AL.

Examiner

Tom Y Lu

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 26 is objected to because of the following informalities: video sequences do not comprise MPEG-3 format because MPEG-3 is used for audio compression, MP3. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuchinsky et al ("FotoFile: A Consumer Multimedia Organization and Retrieval System", CHI 1999, Pittsburgh PA USA, ACM 1999 0-201-48559-1, pages 496-503) in view of Lang et al ("Looking at Pictures: Affective, facial, visceral, and behavioral reactions" Psychophysiology, 1993, pages 261-273) and further in view of Essa ("Facial Expression Recognition using a Dynamic Model and Energy", International Conference on Computer Vision '95, Cambridge, MA, June 20-23, 1995)

- a. Referring to Claim 1, Kuchinsky teaches retrieving from storage a set of photos to be transmitted to said viewer based on an identifier associated with the mood (Kuchinsky at page 498, right column, lines 7-12, teaches using annotating content as retrieval attributes, and such annotating contents is associated with the viewer's emotional characteristics, page 499, left column, line 10. The annotating

contents are also called metadata attributes, which are used to tag photo pictures, page 498, left column, lines 12-14), and transmitting the set of photos retrieved to said viewers for display in the form of an electronic photo album (page 498, left column, lines 23-25). However, Kuchinsky does not teaches the tag identifier is an emotional identifier, where the emotional identifier is related to the viewer's mood, and the mood of determined by the facial expression of the viewer on an image taken by a camera, and the image is subjected to a pattern recognition module of a processor. Lang teaches the viewer's emotional interests/mood at pictures can be measured based on the viewer's facial action, page 266, right column, lines 1-12. However, Lang does not teach the facial action/expression is determined by analysis of a facial expression image of said viewer taken by a camera, by a pattern recognition module of a processor. Essa teaches using a pattern recognition module of a processor to analyze facial expression images, and determine a person's mood (see figure 8 in "Facial Expression Recognition using a Dynamic Model and Energy", and section 5.2). At the time the invention was made, a person of ordinary skill in the art would have been motivated to use a mood/emotion of a person when viewing a picture as the metadata attribute for later retrieval purpose because Kuchinsky teaches the annotating contents can be used as retrieval attributes, and the annotating content can be anything as long as it matches the user's expectations (page 498, left column, line 26) and keeps the annotating process enjoyable (page 498, right column, line 25), which means the annotating content can be user's/viewer's mood/emotional interest at a picture

through the facial expression, and it certainly keeps the annotating process automated and enjoyable as requested by Kuchinsky. In addition, a person of ordinary skill in the art would also be motivated to use Essa's pattern recognition module to analyze a viewer's mood/emotional interest when he/she is viewing a picture because Lang asks the facial actions to be accurately measured to rate the interest of a person at a picture, and Essa's pattern recognition module precisely provides the need by scaling the facial expression, such as smile, sadness or etc, in numbers as shown in figure tables on page 7, so a system can correctly rate the interest of the person at the picture.

- b. Referring to Claim 2, the combination of Kuchinsky, Lang and Essa teaches wherein the set of photos is transmitted over the Internet to said viewer, and said electronic photo album comprising a virtual photo album (see Kuchinsky, page 499, figure 1, and left column, line 11).
- c. Referring to Claim 3, the combination of Kuchinsky, Lang and Essa teaches wherein the pattern recognition module is locally attached computer (the pattern recognition module in Essa is an independent system module, which can be attached to a local computer or a remote server).
- d. With regard to Claim 4, see explanation in Claim 3.
- e. Referring to Claim 5, the combination of Kuchinsky, Lang and Essa teaches wherein the previously stored images are facial expressions of the viewer (Essa teaches there are 5 facial expression of a person used as templates for comparison. Essa, page 7, lines 11-12).

- f. Referring to Claim 6, the combination of Kuchinsky, Lang and Essa teaches providing the previously stored images of the facial expression of the viewer with emotional identifiers (Kuchinsky teaches the annotating contents are used as retrieval attributes, and since the facial expression are used as annotating contents, of course, there are previously stored image of facial expression of the viewer with emotion identifiers stored in a database memory waiting for retrieval).
- g. Referring to Claim 7, the combination of Kuchinsky, Lang and Essa teaches wherein the emotional identifier are supplied by the viewer to designate a particular mood for the facial expression for each respective image of said plurality of previously stored image (Essa teaches the facial expression of the each image represents a particular mood for the viewer, see figure 9 in Essa).
- h. With regard to Claim 8, see explanation in Claim 5.
- i. With regard to Claim 9, see explanation in Claim 6.
- j. With regard to Claim 10, see explanation in Claim 7.
- k. Referring to Claim 11, the combination of Kuchinsky, Lang and Essa teaches capturing a second image of a facial expression of the viewer subsequent to said viewer looking at least at one photo of said set of photos transmitted; updating the set of photos transmitted according to the second image of the facial expression captured (Essa teaches there are 5 different facial expression templates, and Lang teaches the rated interest of a person at different pictures is different because of different facial expressions as result of different reactions at the pictures,

therefore, the attribute tags in Kuchinsky will be different for different photo pictures).

- l. Referring to Claim 12, the combination of Kuchinsky, Lang and Essa teaches wherein the image of the facial expression is captured as one of a JPEG image, TIFF image, BMP image and PCX image (the above mentioned image formats are the most popular standard image formats available for image processing).
- m. Referring to Claim 13, the combination of Kuchinsky, Lang and Essa teaches wherein the image of the facial expression is a video sequence (Essa teaches the image of the facial expression is a video sequence).
- n. Referring to Claim 14, the combination of Kuchinsky, Lang and Essa teaches wherein the said video sequence comprises an MPEG sequence (the standard video image format is MPEG).
- o. Referring to Claim 15, the combination of Kuchinsky, Lang and Essa teaches wherein modifying the emotional identifier associated with the mood of the viewer according to at least one of local weather; other people adjacent to the viewer; illumination adjacent to the viewer; time of day; date; and preferred activities of the viewer (Kuchinsky at page 500, left column, lines 1-4, teaches modifying the identifier based on faces of new people adjacent to the viewer).
- p. Referring to Claim 16, the combination of Kuchinsky, Lang and Essa teaches wherein includes transmitting an order of the set of photos according to the modification to the emotional identifier (Kuchinsky teaches using the confirmed attribute tag to retrieve photo pictures).

Art Unit: 2621

- q. With regard to Claim 17, see explanation in Claim 1, the only additional limitation is a display for display set of photos to the viewer as a virtual photo album (see figure 1 in Kuchinsky).
- r. Referring to Claim 18, the combination of Kuchinsky, Lang and Essa teaches wherein said user interface means includes feedback means for transmitting subsequent images of said viewer's facial expression after a display of at least one photo of said set photos (Kuchinsky's user interface means includes feedback means for transmitting annotating contents after photo pictures are displayed); wherein said pattern recognition module of said processor compares said subsequent images of said viewers facial expression for determining the mood of the viewer according tot said subsequent images (Essa teaches the pattern recognition module analyzes the facial expressions to determine the mood of a viewer at pictures in Lang, and the mood/emotional interest is used as annotating content/retrieval attributes in Kuchinsky's retrieval system to retrieve photo pictures in a photo album); and said retrieval means retrieves a respective set of electronic photos corresponding to the mood of the viewer determined according to each of said subsequent images of the viewer's facial expression.
- s. With regard to Claim 19, see explanation in Claim 12.
- t. With regard to Claim 20, see explanation in Claim 12.
- u. With regard to Claim 21, see explanation in Claim 2.
- v. With regard to Claim 22, see explanation in Claim 2.
- w. With regard to Claim 23, see explanation in Claim 1 for virtual photo album.

Art Unit: 2621

- x. With regard to Claim 24, see explanation in Claim 1 for virtual photo album.
- y. With regard to Claim 25, see explanation in Claim 13.
- z. With regard to Claim 26, MPEG, MPEG-1, MPEG-2, and MPEG 4 are the standard compression formats for video sequence (note there is no MPEG-3, which is MP3 used for audio compression).
- aa. Referring to Claim 27, the combination of Kuchinsky, Lang and Essa teaches wherein said user interface means include means for initially inputting photos of facial expressions of said viewer for stages in said storage area of said processor, each one of said photos having an associated emotional identifier that indicates a mood represented by each representative facial expression of said each one of said photos (Kuchinsky teaches a storage means for storing the photo pictures and the metadata attributes used to tag the photo pictures, and since the attributes in Kuchinsky now refers to the facial expression of the viewer as taught by the combination of Lang and Essa, therefore, the facial expressions as attributes are stored in the storage means as well).
- bb. With regard to Claim 28, see explanation in Claim 27.
- cc. With regard to Claim 29, see explanation in Claim 27.
- dd. With regard to Claim 30, see explanation in Claim 27.
- ee. With regard to Claim 31, see explanation in Claim 27.
- ff. With regard to Claim 32, see explanation in Claim 27.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Matraszrek et al, US Publication No. 2003/0117651 A1, see figures 2-4C.
- b. Fedorovskaya et al, U.S. Publication No. 2003/0156304 A1, see figures 2-6B.
- c. Parulski et al, U.S. Patent No. 6,629,104 B1, see figure 1.
- d. Black et al, "Tracking and Recognizing Rigid and Non-rigid Facial Motions using Local Parametric Models of Images Motions", IEEE, ISBN 0-8186-7042-8, pages 374-381, 1995.

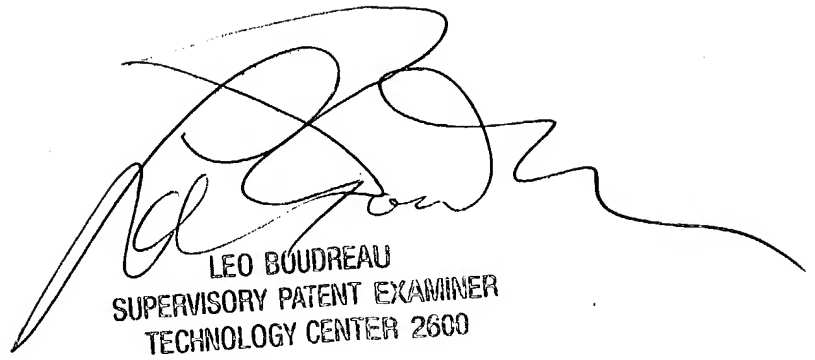
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Y Lu whose telephone number is (703) 306-4057. The examiner can normally be reached on 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H Boudreau can be reached on (703) 305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2621

Tom Y. Lu



LEO BOUDREAU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600